

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A ~~system~~ base station (BS) for transmitting a sequence of data blocks ~~from a transmitter to a receiver~~, the BS system comprising:

a plurality of transmit processors for transmitting the sequence of data blocks, each data block including an identification of the transmit processor that transmits the data block;

a scheduler for assigning each data block to the transmit processor that is released most recently from transmission[[:]]

~~a plurality of receive processors for receiving the transmitted data blocks; and~~

~~—— a reordering processor for reordering the received data blocks into the sequence;~~

~~—— whereby an error in transmission of a data block is detected using said identification.~~

2. (Currently Amended) The BS system of claim 1, further comprising:
receiving wherein a receive processor transmits an acknowledgement when a data block is transmitted ~~received~~ without error, thereby releasing the corresponding transmit processor for transmission of the next data block.

3. (Currently Amended) The BS system of claim 1 wherein a sequence number of the data block is transmitted ~~to the receive processor.~~

4. (Currently Amended) The BS system of claim 3 wherein an said error is detected when a sequence number is missing.

5. (Currently Amended) The BS system of claim 1 wherein the said identification is a tag attached to the data block.

6. (Currently Amended) The BS system of claim 1 wherein the said identification is transmitted separately from the data block.

7. (Currently Amended) A method for transmitting a sequence of data blocks ~~from a transmitter to a receiver~~, the method comprising ~~the steps of:~~

assigning a data block to a transmit processor that is released most recently from transmission;

transmitting the data block by the assigned transmit processor with an identification of the transmit processor that transmits the data block[;]

~~receiving the transmitted data block by a receive processor;~~

~~reordering the received data blocks into the sequence; and,~~

~~detecting an error in transmission of a data block using said identification.~~

8. (Currently Amended) The method of claim 7 further comprising: ~~the step of~~ assigning a sequence number to each data block.

9. (Cancelled).

10. (Currently Amended) The method of claim 7 further comprising ~~the step of sending~~ receiving an acknowledgement ~~to a transmit processor~~ when a the receive processor receives a data block without error, whereby the corresponding transmit processor is released for transmission of the next data block.

11. (Currently Amended) The method of claim 7 wherein said the identification is transmitted separately from said the data block.

12. (Currently Amended) The method of claim 7 wherein said the identification is a tag attached to the data block.

13. (New) A wireless transmit/receive unit (WTRU), the WTRU comprising:

a plurality of receive processors for receiving a sequence of data blocks, each data block including an identification of a base station (BS) that transmitted the data block; and

a reordering processor for reordering the received data blocks into a sequence, whereby an error in transmission of a data block is detected using the identification.

14. (New) The WTRU of claim 13 wherein one of the plurality of receive processor transmits an acknowledgement when a data block is received without error, thereby releasing the corresponding transmit processor for transmission of the next data block.

15. (New) The WTRU of claim 13 wherein a sequence number of the data block is received.

16. (New) The WTRU of claim 15 wherein the error is detected when a sequence number is missing.

17. (New) The WTRU of claim 13 wherein the identification is a tag attached to the data block.

18. (New) The WTRU of claim 13 wherein the identification is transmitted separately from the data block.

19. (New) A method for receiving a sequence of data blocks, the method comprising:

receiving the transmitted data block by a receive processor, including an identification of the transmit processor that transmitted the data block;

reordering the received data blocks into the sequence; and

detecting an error in transmission of a data block using the identification.

20. (New) The method of claim 19 wherein the error is detected when a sequence number is missing.

21. (New) The method of claim 19 further comprising transmitting an acknowledgement when the receive processor receives a data block without error,

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whereby a corresponding transmit processor is released for transmission of the next data block.

22. (New) The method of claim 19 wherein the identification is received separately from the data block.

23. (New) The method of claim 19 wherein the identification is a tag attached to the data block.